

**REQUEST FOR A "DECLARATION" DEFINING THE EXPRESSION
"MONOTYPICAL GENUS"**By **FRANCIS HEMMING**, C.M.G., C.B.E.,*Secretary to the International Commission on Zoological Nomenclature*

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The purpose of the present application is to ask the Commission to adopt a *Declaration* defining the expression "monotypical genus". The need for such a *Declaration* has come to light in the course of current work in the Office of the Commission on the preparation for publication in book form of the first instalment of the *Official List of Generic Names in Zoology*. Briefly, the need for a Ruling on this subject arises out of an apparent inconsistency between two amendments to the *Règles* made by the Thirteenth International Congress of Zoology, Paris, 1948. The first of the provisions so adopted by that Congress contained a definition of the expression "originally included species" for the purposes of Article 30, the second had as its object a relaxation of the terms of Proviso (c) to Article 25 in relation to the "indication" of a type species for a nominal genus under Rule (c) in Article 30 (Rule relating to the determination of the type species of a genus by monotypy).

2. The question of what is "an originally included species" for the purposes of Article 30 (the Article which prescribes the manner in which the species to be accepted as the type species of a nominal genus is to be determined) was discussed at length by the Commission at a Public Session held at Paris in 1948 during the Thirteenth International Congress. Everyone was agreed that it was a serious defect in Article 30, as it then existed, that it contained no definition of what was to be regarded as an originally included species for the purposes of this Article, for the lack of such a definition meant that an author making a type selection under Rule (g) was given no guidance as to what were the nominal species from which he was entitled to choose a type species. The whole of the discussion was concerned with Rule (g) (type species by subsequent selection). It will be seen from the following extract from the Official Record of the meeting concerned that in the course of the discussion which led up to the recommendation submitted by the Commission and later approved and adopted by the Congress it was pointed out that, "if it had been practicable, the most satisfactory course would have been to restrict the field of selection for the type species of a given nominal genus to those nominal species which had been accepted by the original author as taxonomically valid species and had been included by him in the genus. In a large number of cases, however, the currently adopted type selection of a nominal genus was one in which some author had selected as the type species a nominal species which had been included by the original author of the generic name not as a taxonomically valid species but as a synonym of one of the nominal species accepted

by him as a taxonomically valid species and included by him as such in the nominal genus concerned" (1950, *Bull. zool. Nomencl.* 4 : 178). It was in the light of these considerations that it was decided that in the interests of nomenclatorial stability it was necessary, when defining an "originally included species" for the purposes of Rule (g) in Article 30 to bring within the scope of the definition nominal species cited as synonyms of nominal species accepted by the author of the generic name as taxonomically valid species belonging to the genus so named. It is clear from correspondence received after the Congress that any other definition of what constitutes an "originally included species" for the purposes of Rule (g) in Article 30 would have upset many currently accepted type selections and would have led to a great deal of name-changing, dissatisfaction and confusion.

3. The following is the decision taken by the Paris Congress on the subject of the species to be accepted as species originally included in a nominal genus (1950, *Bull. zool. Nomencl.* 4 : 179—180, Decision 69(3)(a)) :—

(3) that words should be inserted at appropriate points in Article 30 to make it clear :—

(a) that the nominal species to be regarded as having been included in a given nominal genus at the time when the name of that genus was first published are (i) the nominal species cited by the original author as valid taxonomic species belonging to that genus and (ii) any nominal species cited on that occasion as synonyms of nominal species falling in (i) above and that for such a nominal genus the foregoing nominal species were alone eligible for selection as type species ;

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4. It will be seen from the terms of the decision quoted above that, although the discussion which led up to that decision was concerned only with the problem arising in connection with the interpretation of Rule (g) in Article 30 (Rule relating to the selection of a type species by a subsequent author), the terms of that decision were quite general in character and appear to apply that decision to that Article as a whole, for it prescribes that the definition of "an originally included species" then adopted is to be inserted "at appropriate points in Article 30", a phrase which would not have been used if the intention had been expressly to confine that definition to Rule (g) alone. If this were the only decision taken by the Paris Congress bearing on this problem, it would be necessary to conclude that, although the special case arising in connection with Rule (c) in Article 30 (Rule relating to the indication of type species by monotypy) was not expressly considered at the time when the foregoing decision was taken, the definition of "an originally included species" then adopted nevertheless applied to Rule (c) equally with Rule (g). As we shall

see however, a decision was taken by the Paris Congress in connection with Rule (c) which shows clearly that it was not the intention of the Congress to apply the foregoing definition to Rule (c) in the foregoing Article.

5. Rule (g) in Article 30 is applicable only to names published for nominal genera before 1st January 1931, since under the amendment to Article 25 adopted at Budapest by the Tenth International Congress of Zoology the new Proviso (Proviso (c)) to the above Article then inserted came into force as from the above date. Under this Proviso no generic name published on or after 1st January 1931 was to acquire the status of availability unless accompanied by an unequivocal designation of the type species of the genus so named. Accordingly, under that provision Rule (g) was restricted in its application to generic names published not later than 31st December 1930.

6. During the period between the Budapest (1927) and Paris (1948) Congresses experience showed that the well-intentioned provisions then incorporated into Article 25 were unduly restrictive in character, having the effect of invalidating names for purely technical nomenclatorial reasons. These "ritualistic" provisions, as they were called by their critics, gave rise to much dissatisfaction, and there was a strong demand for their relaxation. When this matter was considered by the Commission and the Congress at Paris in 1948, extensive changes were made in Proviso (c) to Article 25 for the purpose of removing the objectionable ritualistic features in question. These amendments related to the expressions (1) "summary of characters", (2) "definite bibliographic reference" and (3) "definite and unambiguous designation of the type species". It is the last of these amendments with which we are here concerned. In this case it was agreed by the Paris Congress to relax Proviso (c) to Article 25 in such a way that a generic name published after 31st December 1930 should be an available name not only when accompanied by an unambiguous type designation of the genus concerned but also when a type species was "indicated" in accordance with one or other of the Rules laid down in the first group of Rules in Article 30 (i.e., the group of Rules headed "Cases in which the generic type is accepted solely upon the basis of the original publication"). In other words, the Paris Congress decided that a generic name published after 31st December 1930 was to be accepted as having acquired the status of availability if at the time when it was first published its author "indicated" the type species for the genus so named under Rules (b), (c) or (d) (1950, *Bull. zool. Nomencl.* 4 : 72, Decision 8(1)) as well as when he "designated" a type species under Rule (a). It is this amendment to Article 25 in relation to Rule (c) in Article 30 which it is now necessary to consider.

7. So far as concerns generic names published after 31st December 1930 and regarded by their authors as containing only one taxonomically valid species, we have two decisions by the Paris Congress which must be considered. These are : (1) the decision (paragraph 6 above) under which, while maintaining the provision that names published in this period must, in order to be available, have been published with a type species, provides that this condition is to be regarded as being satisfied if the author when publishing the generic name in

question treated that genus as containing only one species (or cited in connection with it only one species) (1950, *Bull. zool. Nomencl.* 4 : 153), and (2) the decision (quoted in paragraph 3 above) that, where a nominal species is identified by the author of a generic name with (i.e., where its name is synonymised with that of) a nominal species regarded as a taxonomically valid species by the author of the generic name both the nominal species concerned are to be treated as "originally included species". If Decision (2) (which was taken with special reference to Rule (g) in Article 30) were to apply—as the wording used suggests—to Rule (c), the effect would be that any generic name published after 31st December 1930 which was treated by its author as containing only one taxonomically valid species but for which he cited, as a synonym, the name of some other nominal species, would be the name of a genus established with two originally included species. Accordingly, in every case where the author of such a generic name omitted expressly to designate as the type species of his new genus, the only species which on taxonomic grounds he recognised as belonging to that genus, the nominal genus in question would be a genus established after 31st December 1930 without a designated or indicated type species and the generic name in question would automatically have no status in zoological nomenclature.

8. Quite apart from the fact that it is certain that this was not the result intended by the Commission and the Congress when amending Proviso (c) to Article 25 (in the way described in paragraph 6 above), it is not possible reasonably to read such an intention into the amendment so adopted, for, if that had been what was intended, the amendment adopted would have applied only to the names of those genera regarded by their authors as being monotypical and where no synonyms were cited for the sole species recognised by the author of the generic name as being referable on taxonomic grounds to the genus so named. Thus, any generic name, for the type species of which a synonym was cited by the original author would gain no benefit from the relaxation of Proviso (c) made by the Paris Congress and would remain subject to the ritualistic provisions adopted by the Budapest Congress which it was the object of the Paris Congress to delete from Article 25.

9. In these circumstances the only reasonable course appears to be to conclude that the provision containing the definition of "an originally included species" adopted by the Paris Congress for the purpose of remedying a defect in Rule (g) in Article 30, was not intended to apply to Rule (c) in that Article, notwithstanding the fact that (as noted in paragraph 4 above) the words used in recording that decision seem to imply such an intention. There is indeed a formal inconsistency between the decisions described respectively as Decision (1) and Decision (2) in paragraph 7 above, for under the interpretation here suggested, the opening words used in Decision (1) must be regarded as unduly wide, while under the opposite interpretation, the amendment of Proviso (c) to Article 25 adopted by the Paris Congress would become circumscribed to

such an extent that it clearly could not represent the intention of the Congress. For these reasons therefore it is highly desirable that the Commission should render a *Declaration* clarifying the relationship of the foregoing provisions inserted in the *Règles* by the Paris Congress.

10. Two possible interpretations appear to be possible: (A) The Commission might direct that the Paris definition of "an originally included species" applies to generic names published before 1st January 1931 but not to generic names published on or after that date. (B) The Commission might rule that the foregoing definition does not apply to Rule (c) in Article 30, applying only to Rule (g) in that Article. Interpretation (A) would resolve the inconsistency noted between the two Paris decisions there discussed, but it would involve an anomalous distinction in the matter of the species to be deemed to be "originally included species" as between names published (a) before, and (b) on, or after, 1st January 1931. Interpretation (B) (which is, I am convinced, in harmony with the actual intention of the Paris Congress) avoids the foregoing anomaly, but it creates a distinction in the matter of what constitutes "an originally included species" as between genera, the type species of which fall to be determined under Rule (c) and those, the type species of which are determinable under Rule (g). There are, however, in my view, sound logical grounds for making this distinction.

11. It is necessary, however, at this point, to turn to the practical question whether such a distinction would be in harmony with, or contrary to, current nomenclatorial practice. Valuable light on this subject is thrown by the experience gained in the work now in progress in the Office of the Commission in the preparation for publication in book form of the first instalment of the *Official List of Generic Names in Zoology*. Of the names now on the *Official List* many (a) were stated by the original applicant to be monotypical, (b) were placed on the *Official List* by the Commission as being the names of monotypical genera and (c) are currently accepted by specialists in the groups concerned as being the names of genera, the type species of which were determined by monotypy. The genera concerned are drawn from a wide range of groups in the Animal Kingdom and the names concerned afford a fair sample of the practice of zoologists in this matter. In a certain number of cases (mostly, so far, in the mammals, birds and Decapod Crustacea) the original author (1) was of the opinion that his genus contained only one taxonomically valid species but (2) cited in connection with the name of that species the name of one or more nominal species which he identified with the species which on taxonomic grounds he regarded as the sole species belonging to that genus. In every such case the applicant regarded the genus concerned as being monotypical and that view was accepted by the Commission. From the evidence afforded by this sample it appears to me to be likely that the general practice has been to treat such genera as being monotypical.

12. In the case of the great majority of names published before 1st January 1931 it is likely that no disturbance in the matter of the type species of the

genera concerned would result if in such cases the genera concerned were not treated as being monotypical, for it is reasonable to expect that in most cases the first subsequent author to specify by name the type species of these genera so specified the nominal species accepted by the author of the generic name in question as the sole taxonomically valid included species. In this class of case there would be no change in the currently accepted type species, the only change being that, instead of that species being regarded, as hitherto, as being the type species by monotypy, it would in future be regarded as the type species by subsequent selection (under Rule (g)). No doubt, however, cases can be found where such a genus has not been treated as being monotypical, and the currently accepted type species is not the nominal species regarded by the author of the generic name as the sole taxonomically valid species referable to the genus so named but a nominal species identified with that species by the author of the generic name and therefore specified by him in the synonymy of that species. For the reasons explained in paragraph 11 above, this is, however, I believe, a rare class of case.

13. While therefore no great interference with current nomenclatorial practice would be likely, very serious inconvenience and waste of time better spent on genuine taxonomic work would be involved if the Paris definition of "an originally included species" were to be held to apply to Rule (c) in Article 30. For it would involve in every group two bibliographical investigations which would otherwise be unnecessary. First, it would be necessary to re-check the original book or serial containing the first publication of every name for a genus currently treated as being the name of a monotypical genus for the purpose of ascertaining whether the author of that generic name, when citing the name of the sole species recognised by him on taxonomic grounds as belonging to that genus, had in addition cited some other specific name as a synonym. Second, in every case where it was found that the author of such a generic name had cited a synonym for the single species which he regarded himself as placing in the genus so named, it would be necessary to make a search of the literature for the purpose of ascertaining by whom, when and where one or other of the two nominal species concerned had first been selected by a subsequent author to be the type species of the genus concerned. It is, in my view, of great importance that zoologists should be spared this fruitless and time-consuming search.

14. My general conclusion is therefore of the two possible interpretations that the more logical (paragraph 10 above) and also the more desirable from the point of view of avoiding unnecessary bibliographical investigations (paragraph 13 above) is that under which the definition of "an originally included species" adopted by the Paris Congress should be restricted to the purpose for which it was devised (that is, for giving guidance to authors when making type selections under Rule (g) in Article 30) and that it should not apply to Rule (c) in that Article, a Rule for which it was not designed and for which it would be much better (as here proposed) to follow the clear intention of the original author.

15. I accordingly recommend the International Commission to adopt a *Declaration* on the following lines :—

DRAFT DECLARATION : (1) The definition of the expression “originally included species” adopted by the Thirteenth International Congress of Zoology, Paris, 1948 (1950, *Bull. zool. Nomencl.* **4** : 179—180, Decision 69(3)(a)) is to be interpreted as applying only to Rule (g) in Article 30, that is, for the purpose of providing guidance as to what are the nominal species from which alone an author acting under the foregoing Rule may select a type species for a nominal genus established prior to 1st January 1931, for which no type species was designated or indicated by the original author under the earlier Rules in the said Article.

(2) Where an author, when publishing a new generic name, cites by name only one species as belonging to the genus so named, the nominal species so cited is to be accepted as the type species of the genus in question, irrespective of whether the author concerned cites in the synonymy of that species the name of another, or the names of other, nominal species (type species by monotypy).